What is claimed is:

- 1. A single plate type solid-state image pickup device having primary-color type color filters, characterized in that gray filters are arranged at specific pixels of the arrangement of the three primary color filters.
- 2. The single plate type solid-state image pickup device as claimed in claim 1, wherein the color arrangement of said color filters is Bayer arrangement, and green filters that are adjacent to red filters in the horizontal direction or green filters that are adjacent to blue filters in the horizontal direction are replaced by said gray filters.
- 3. The single plate type solid-state image pickup device as claimed in claim 1, characterized by comprising: means for taking carrier balance so that said gray filters have the same frequency characteristic as the other three primary color filters, and means for synthesizing an outline correcting signal.